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ABSTRACT OF THE DISCLOSURE

A papermaking refiner has two stationary disks mounted to the support structure of a fixed housing. A rotating disk is mounted on a shaft which extends through the housing. The support structure allows stock to circulate on both sides of the disk support structure, thus balancing fluid pressures on both sides of the fixed disk and preventing thermal gradients for reduced deflection of the disks. The incoming stock is centrifugally accelerated in a shroud which separates and traps tramp metal or the like before the stock passes to the refiner disks. The shroud has passageways which allow the rotating fluid to enter a reservoir which surrounds the drive shaft and feeds the gaps between the rotor and the stationary plates.

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